



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/681,997      | 10/08/2003  | Junichi Ouchi        | F-7999              | 8936             |

28107 7590 03/10/2005

JORDAN AND HAMBURG LLP  
122 EAST 42ND STREET  
SUITE 4000  
NEW YORK, NY 10168

EXAMINER

TWEEL JR, JOHN ALEXANDER

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2636     |              |

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/681,997             | JUNICHI OUCHI       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | John A. Tweel, Jr.     | 2636                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because of the following errors: The word “detecting” has been repeated before and after the parenthetical phrase at lines 5 and 7. The word --of-- is needed before “the moving object” at line 7. An article such as --the-- or --a-- is needed before “vehicle” in line 12. The word “vehicles” should be singular in line 12 to agree with the rest of the abstract. Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities:
- Page 1, Line 8: It is unknown exactly what the phrase “through the sloped road to the two-level crossing especially” refers to.
  - Page 1, Line 19: An article such as --a-- is needed before “vehicle”.
  - Page 3, Line 22: A word --of-- is needed before “the moving object”.
  - Page 5, Line 1: The word --by-- is needed before “the second acceleration sensor”.
  - Page 5, Lines 1-2: The phrase “the under uniform operation” is awkward as written.
  - Page 6, Line 20: What exactly does “differs mainly explained slope” mean?
  - Page 6, Line 26: The verb “mounting” should be replaced with --mounted--.

- Page 7, Lines 2 and 4: The word “detecting” has been repeated before and after the parenthetical phrase at lines 2 and 4.
- Page 7, Line 11: The phrase “during it passes” could be replaced with --as it passes--.
- Page 7, Line 14: The phrase “and it can install” might be replaced with --and it can be installed--.
- Page 7, Lines 18-19: What exactly is the purpose of advantage number (4)? Is this referring to the claims?  
Appropriate correction is required.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities:
  - Line 2: The verb “mounting” should be replaced with --mounted--.
  - Lines 6 and 7: The word “detecting” has been repeated before and after the parenthetical phrase at lines 6 and 7.
  - Line 7: The word --of-- is needed before “the moving object”.Appropriate correction is required.
4. Claim 2 is objected to because of the following informalities:
  - Line 6: The word “detecting” has been repeated before and after the parenthetical phrase at line 6.
  - Line 7: The word --of-- is needed before “the moving object”.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 2, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

7. The claims, aside from the objections raised above, are found to contain allowable subject matter.

8. The following is a statement of reasons for the indication of allowable subject matter:

There are many detectors for measuring vertical acceleration in a vehicle; however, none determine the slope of a vehicle by measuring both horizontal and vertical acceleration and then determining whether the sum of the squares of the

Art Unit: 2636

horizontal and vertical acceleration is equal to the second power of gravity acceleration and calculating the slope of the vehicle thereof.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Carlson et al** [U.S. 6,417,767] indicates rapid deceleration to warn the operator of a vehicle.

**Fennel et al** [U.S. 6,614,343] determines the vehicle status quantities on the basis of forces acting on the wheel and tire sensors.

**Le et al** [U.S. 6,856,868] is a rollover detection system for an automotive vehicle.

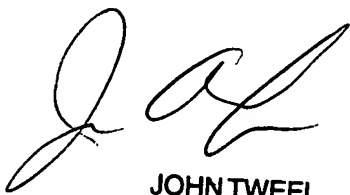
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Tweel, Jr. whose telephone number is 571 272 2969. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass can be reached on 571 272 2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2636

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT  
3/6/05



JOHN TWEEL  
PRIMARY EXAMINER